

"Atomic model" to promote learning transformation

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Abstract

"6D rule" provides a set of systematic design concepts, tools and methods for learning development projects, but the difficulty is how to make D4 promote learning transformation and D5 implement performance support. Based on the in-depth analysis of "D4" and "D5", this paper establishes the "atomic model". trainees are the center of learning and development projects as the "atomic nucleus". Employers, human resources departments responsible for supervision and inspection and training institutions are the three "electrons" around the "atomic nucleus" - trainees, which provide the basis support for transformation and performance.

Keywords

"6D rule"; transformation; "atomic model".

1. Introduction

"6D rule" provides a set of systematic design concepts, tools and methods for learning and development projects, which can guide training managers to transform training, learning and development projects into business benefits expected by enterprises, especially in learning transformation and performance support. Since 2014, the school has introduced and promoted the application of "6D rule" to design the training project. Through more than one year of exploration and practice, in 2015, combined with the training project, the school carried out the research on the application of "6D" training and learning mode in the training of top-notch skilled talents in oilfield enterprises. In December 2015, we analyzed the projects designed by applying "6D rule", and found that there was a common phenomenon that the understanding and application of "6D rule" were not deep enough. The main reason was that the project designers could not understand the connotation of each "d", so that the key links of training could not be dealt with, which made the "6D rule" not really implemented, especially in the application of "D4" and "D5". Therefore, through in-depth analysis of "D4" and "D5", this paper establishes relevant models to clarify the responsibilities of employers, human resources departments and training institutions.

2. "D4" promotes learning transformation

More and more evidence shows that pure classroom teaching can hardly, or at all, help to improve work behavior. Only when the knowledge and skills learned are applied to work practice and are useful to individuals and organizations, can learning be said to be valuable. On the contrary, it can only be regarded as a waste of time and resources, which is the reason why "D4" law "promotes learning transformation". The main function of "D4" rule is to make the trainees "I am willing". As long as the trainees are willing to apply the knowledge and skills they have learned to their work, no matter what the effect is, training is not "waste". There are three factors that affect the subjective initiative of "I am willing": first, the trainees should be able to use the knowledge and skills learned in the training (application ability); second, the trainees are encouraged to use the knowledge and skills learned in the training (application motivation); third, the working environment provides the necessary conditions for the trainees to use the

knowledge and skills learned (working environment). Besides, motivation, ability and working environment interact and restrict each other. 【1】

(1) Three factors affecting the transformation of learning -- application ability

There are four factors that affect trainees' application ability of learning transformation.

Personal ability. trainees must have the ability to change themselves in their work (time, energy, mental space).

Opportunities. The work the trainee is engaged in must provide him with sufficient opportunities (tasks and resources) to apply new knowledge and skills.

The effectiveness of training design. Trainees need to feel that the training content is work-related, effective and practical.

The effectiveness of teaching contents and methods. To a certain extent, the teaching method in classroom training will also affect whether the trainees are willing to apply what they have learned.

The effectiveness of personal ability, opportunity, training design and teaching methods affect the application ability of learning transformation. Therefore, when designing a complete experience, we must consider the influence of the above factors on learning transformation. For example, the content of training design should closely focus on business income, and do not set courses unrelated to business income. During the training, the training mode of integration of special lecture, exchange seminar and on-site learning is used. That is, for a special topic, first invite relevant experts to explain the theory, and then go to the scene for targeted learning, and finally with questions or inspiration for this topic for exchange and discussion. The training mode here can be adjusted in order according to the actual situation.

(2) Three factors affecting the transformation of learning motivation of application

There are three factors that affect trainees' application motivation.

Trainees believe that the application of new knowledge and skills will improve the degree of job performance.

The degree to which trainees believe that the improvement of work performance can be recognized and rewarded.

Trainees value the results of applying new skills.

In addition, there are two subordinate factors that also affect the motivation of application. First, trainees' confidence in making changes and making progress. Obviously, the trainees who firmly believe that they have the ability to make changes and grow up are more likely to be motivated, so they are more likely to try to put what they have learned into practice. On the contrary, those who attribute the effect of learning to environment, gene and other factors have lower enthusiasm to apply what they have learned. Second, the degree of preparation before training also affects the enthusiasm of trainees to apply knowledge. ^[1]

(3) Three elements of learning transformation working environment

The factors of working environment include the influence of managers, the attitude of colleagues and the mechanism of rewards and punishments. The impact of managers mainly includes the number of times that managers provide feedback and guidance to trainees, and the degree of support and promotion of managers to learning transformation perceived by trainees. Correspondingly, the influence of managers also includes the degree of managers' perceived non negative evaluation of learning transformation. The attitude of colleagues includes the degree of acceptance or resistance of colleagues to this change when they are ready to apply what they have learned, and the attitude of colleagues to accept or oppose new skills when they are really useful in work practice. The reward and punishment mechanism includes the reward mechanism of learning for application and the punishment mechanism of not learning for application. ^[2]

Motivation, ability and working environment interact and restrict each other. Take Shengli Vocational College Teachers' participation in the professional ability improvement training project of full-time teachers undertaken by Management Cadre College as an example. Before the teacher participated in the training, the Dean called a meeting to explain the business benefits of the project and the tasks after the training. The first task: return to school to report the relevant content. The second task: using the "guidance technology" learned in the training class to guide the middle-level and above leaders to complete a special topic discussion. In this learning project, the Dean, as the superior manager of the trainees, not only puts forward the task requirements, but also provides the working environment for the trainees' learning transformation. This working environment also allows the trainees to see the objective facts that what they have learned can be used in the actual work. Then suppose that the school does not have any requirements for the teachers who participate in the learning project, and after the training and learning, it depends entirely on the individual's will to decide whether to use the "guiding technology", which will inevitably affect the degree of the trainees' subjective initiative of "I am willing".

3. "D5" implementation performance support

"Promoting learning transformation" promotes trainees' subjective initiative of "I am willing", and does not involve the effect of applying new knowledge and skills. And the trainees are willing to apply, so how to make the effect of trainees' application better, this is the reason for the implementation of "D5" performance support. In order to help trainees smoothly carry out learning transformation, Shengli vocational college has built two platforms, online and offline.

(1) Using the network platform, online counseling.

Each training project establishes a learning and communication group, which brings together the trainees, lecturers, experts, leaders in charge of the student unit and project leaders in the same group. The lecturers and experts follow up the trainees anytime and anywhere to give guidance, so that the guidance of lecturers and experts can be extended beyond the classroom, and the discussion and communication can be extended before and after the training.

(2) Build a practice platform to promote learning transformation.

Shengli Vocational College skill innovation incubation base not only has the professional design and processing ability, but also has a group of multi-disciplinary associate professors and above teachers. It can not only process the trainees' design results and transform their innovative design into innovative products, but also provide them with theoretical and technical support. The six major achievements of integration and optimization of innovation achievements of Shengli Oilfield in 2015 are the fruits of integration and optimization of various resources through training. Through training, the masters mastered TRIZ innovation tools, guided technology, team innovation, etc., and boldly tried to apply them in combination with difficult post problems. They not only got the support of their unit leaders, but also got the strong support of relevant departments and leaders of Human Resources Department of Shengli Oilfield.

4. "D4" + "D5" - atomic model

Anything done (or not done) in the transformation phase determines whether the training program can achieve the established business benefits. Therefore, to guide and support learning transformation is in the interests of trainees, student units and training departments. At present, the training is faced with the following problems: employers complain that training takes up too much time, funds and other resources, and after the training, the behavior of trainees in the

unit has little improvement, and the return is far lower than the expected. However, the training institutions think that the trainees have passed the examination during the training period and the trainees think that the training effect is very good, but the employers do not give the trainees the conditions to apply what they have learned, which leads to that the knowledge they have learned has not been transformed and the training value can not be realized. Therefore, the training effect of various departments buck passing and complain to each other.

A popular saying in the training industry is "trainees should be the center". So the question is, "who is student-centered" and "what is student-centered". Without a clear understanding of these two issues, taking trainees as the center will be empty talk and routine, which will make the training lose its original intention of "preaching, teaching, solving doubts and improving performance". And these two issues are the essence of "responsibility sharing mechanism". To solve these two problems, we must first determine the problem of who, and then combine the object to determine the problem of what. "Who is student-centered"? In the process of training, it is more or less clear that we should take the trainees as the center, not only the training institutions, but also the units where the trainees work and the departments in charge of supervising and inspecting the implementation of the training. When the object is clear, the next step is to clarify the student-centered responsibilities of these objects in combination with the object. Here, we introduce an "atomic model".

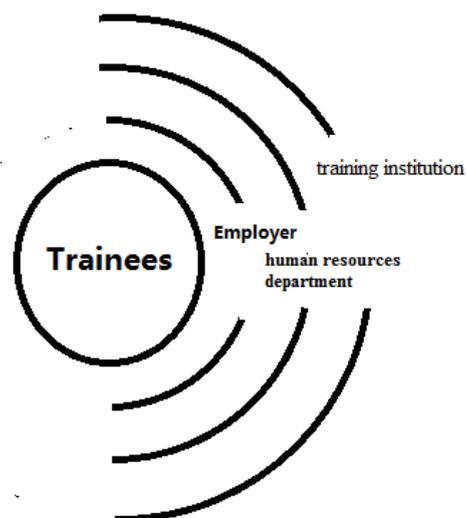


Fig. 1 Atomic model of "D4" + "D5"

At the center of the atom is the nucleus, surrounded by electrons. In the "atomic model", trainees are the center of learning and development projects as the "atomic nucleus". Employers, human resources departments responsible for supervision and inspection and training institutions are the three "electrons" around the "atomic nucleus" - trainees, which provide support for transformation and performance.

In order to ensure that the trainees have the ability and motivation of learning transformation, the training institutions should ensure the practicability and effectiveness of the training content, simulate the actual or on-site teaching as far as possible in the training mode, and provide technical guidance when the trainees return to the unit for learning transformation, so as to help the trainees cross the gap between "learning" and "doing".

In order to ensure that the trainees have the working environment of learning transformation, the student unit should deeply understand the learning project, clarify the business benefits of the project, provide sufficient opportunities (tasks and resources) for the trainees to apply new knowledge and skills, and effectively motivate the trainees' behavior (application motivation) if they use the learned knowledge and skills. In the aspect of performance support,

the student unit can let experienced student colleagues provide guidance (such as teacher apprentice agreement). We can also set up auxiliary manuals and databases in units, such as the "basic post operation manual" compiled by the oilfield and each oil production plant has its own professional qualification test platform for skilled personnel.

The human resources department should supervise and inspect the implementation of training programs of training institutions, and supervise the student units to promote the learning transformation of trainees.

No matter whether the learning project is successful or failed, the training institution, human resource department and student unit are all responsible. Training institutions need to pay more attention to the transformation stage after the learning stage. The trainees need to have a clear understanding: if the learning project is pushed to the training institutions, the expected results of the project can not be achieved without the attention and cooperation of the trainees. The human resource department shall supervise the division of responsibilities between training institutions and trainee units. Only when the unit, human resource department and training institution have clear responsibilities, cooperate with each other, promote the learning transformation of trainees, and implement corresponding performance support, can the center of trainees play its own initiative, make greater breakthroughs in work practice, and serve the management and production of enterprises more efficiently.

5. Conclusion

(1) The ability of trainees to apply the knowledge or skills, motivation and working environment affect the results of learning transformation.

(2) In order to ensure that the trainees have the ability and motivation of learning transformation, the training institutions should ensure the practicability and effectiveness of the training content, simulate the actual or on-site teaching as far as possible in the training mode, and provide technical guidance when the trainees return to the unit for learning transformation, so as to help the trainees cross the gap between "learning" and "doing".

(3) In order to ensure that the trainees have the working environment of learning transformation, the student unit should deeply understand the learning project, clarify the business benefits of the project, provide sufficient opportunities (tasks and resources) for the trainees to apply new knowledge and skills, and effectively motivate the trainees' behavior (application motivation) if they use the learned knowledge and skills. In the aspect of performance support, the student unit can let experienced student colleagues provide guidance (such as teacher apprentice agreement). It is also possible to set up a manual and a database of work aids in the unit.

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